

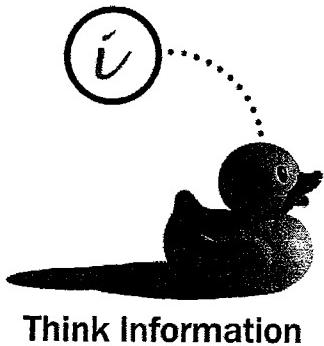
EXHIBIT 5



Furlough Damages in Brady et al vs. The Air Line Pilots Association After Application of Set-Off

Rikk M.T. Salamat, BA, MBA
Principal Consultant, Case Lab Inc.

April 30, 2013



Calculation of Furlough Damages after Application of Set-Off – April 30, 2013
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This report describes the method by which the set-off of furlough damages in the period 2002 to 2011 was calculated for the pilots of the former TWA. Furlough damages include lost income while pilots were on furlough, interest on that income and the impact on pilots' pensions under the American Airlines A and B plans. Such damages do not include future damages (from 2012 onwards) or employment damages from non-furloughed pilots earning less than they otherwise might have under a particular model.

These calculations use pilot responses to the "TWA Pilot Questionnaire" each pilot was mailed in December 2012. As of April 30, 2013 we had received 1,790 responses. Appendix 1 includes a 4th volume of scans that have been received or modified since Volume 3 was provided to ALPA's counsel.

Figure 1 below summarizes, by year, the number of TWA pilots who were on furlough and the number and type of responses received from those pilots. In summary, approximately 82% of the documentation required to calculate or estimate set-off has been received.

Figure 1

Year	Furloughed	Rcvd	Missing	Complete	Partial	Incomplete	% Response
2002	630	487	143	220	266	1	77%
2003	1,287	1,060	227	558	500	2	82%
2004	1,350	1,111	239	601	508	2	82%
2005	1,359	1,120	239	606	512	2	82%
2006	1,317	1,090	227	590	498	2	83%
2007	1,290	1,068	222	580	486	2	83%
2008	1,162	953	209	493	458	2	82%
2009	1,006	809	197	404	404	1	80%
2010	1,079	878	201	448	429	1	81%
2011	993	795	198	396	398	1	80%
	11,473			4,896	4,459		82%

For instance, in 2002 630 TWA pilots were furloughed for at least part of the year. Of those, we received responses from 487. 220 of those responses were "complete" files that included the documents listed in Figure 2. 266 of the responses we received were from pilots whose responses were missing some documents ("partial"), but sufficient information was provided to estimate each pilot's income while on furlough. 1 of the responses received was from a pilot who did not provide sufficient information to estimate their income ("incomplete"). No response was received from 143 pilots ("missing"). In total, then, 77%¹ of the required data to calculate or estimate set-off for 2002 was obtained.

¹ $(220 + 266) / 630$

Each pilot response and associated documentation was classified according to the degree of completeness for years the pilot was on furlough. These classifications are found in the "datacheck" field of the table "pq_header" in Appendix 3. The codes used and their definitions are as follows:

Code	Category	Description
DONE	A	Reviewed and Complete ("Complete" in Figure 1) – Social Security Earnings Report (SSER) is complete, Pilot Response (PR) is complete, and Supporting Docs (W2s, 1099s, 1040s, etc) are complete. Analysis based on SSER, PR and Supporting Docs.
ND_EST	B	Missing Docs Estimate ("Partial" in Figure 1) – SSER is complete, PR is complete, and Supporting Docs are incomplete/absent. Analysis based on both SSER and PR. Supporting Docs are also used when available. If no SSER and/or PR data was provided, but W2s/1040s clearly show wages then income from the latter was used.
SS_EST	B	SS Only Estimate ("Partial" in Figure 1) - SSER is complete, PR is incomplete/absent, and supporting docs are complete/incomplete/absent. Analysis based on both SSER and PR when available, and just SSER for years for which PR is missing. Supporting Docs are also used when available.
PR_EST	B	PR Only Estimate ("Partial" in Figure 1) – SSER is incomplete/absent, PR is complete, and supporting docs are complete/incomplete/absent. Analysis based on both SSER and PR when available, and just PR for years for which SSER is missing. Supporting Docs also used when available.
NR_EST	B	No Response Estimate ("Partial" in Figure 1) - SSER is incomplete/absent, PR is incomplete/absent, and supporting docs are complete/incomplete (but not absent). Analysis based on both SSER and PR when available. Analysis based exclusively on Supporting Docs for years for which SSER and PR are missing.
NR_NOC ND_NOC	C	("Incomplete" in Figure 1) Missing Docs Can't Calculate (ND_NOC) or No Response Can't Calculate (NR_NOC) – Questionnaire was returned but no SSER, PR or Supporting Data provided.
SS_NOC	C	("Incomplete" in Figure 1) SS Only Can't Calculate – SSER is submitted but not complete. No PR. SSER is used when available and nothing is checked for years SSER is missing.
PR_NOC	C	("Incomplete" in Figure 1) PR Only Can't Calculate – PR is submitted but not complete. No SSER response. PR is used when available and nothing is checked for years PR is missing.

Given the different levels of completeness of each pilot response, they were classified as A, B or C. Classes A and B are equivalent insofar as sufficient information was obtained to be able to calculate pilots' earnings in the years when they were on furlough. In class B responses, while not all information may have been provided, it was concluded that income could be calculated from what was submitted. Class C responses are equivalent to non-responses because a pilots' set-off income could not be calculated.

Figure 2

1. A social security earnings report
 2. IRS W2s
 3. The first two pages of IRS 1040s
 4. A signed pilot response with earnings for each year
 5. Other relevant documents
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For each year that pilots were on furlough, pilots' total annual income for purposes of setting off damages was determined by reviewing the information outlined in Figure 2. The overarching objective was to determine, for each calendar year, how much employment income pilots earned that would set-off their furlough damages. As such, income the pilot would have received regardless of having been furloughed, such as back-pay, was not included as set-off income. Likewise, moneys received that eroded future benefits (such as unemployment benefits), investments or savings were not treated as set-off income. Furthermore, expenses for job search or medical insurance premiums were used to offset employment income, provided such expenses did not provide long-term benefits (such as with fees or tuition for job training/education).

In approximately 60% of the cases², the figure listed on the pilot's SSER was used (cvaluesrc = sser in table pq_datacheck). In 10% of the cases, the figure provided by the pilot on his/her statement was used (cvaluesrc = resp). Where there was a discrepancy between PR figures and SSER figures, the higher number was always used, unless supporting documentation proved that lower number was the accurate one. In 1% of the cases the pilot provided insufficient information for the year in question to determine income (cvaluesrc = nodam).

In the remaining 29% of cases (cvaluesrc = other), a base figure, generally that on the SSER, was adjusted to account for income that either increased or decreased the pilot's total set-off income for the year. Those adjustments and their corresponding codes used in the "adjustments" field of the pq_datacheck table are as follows:

AA: American Airlines Income: Where an SSER was absent and pilot response did not include American Airline wages, but W2s or data provided by AMR clearly showed income earned, this difference was added to pilot response.

AE: American Airlines stock/options investment income. If W2s provided showed code 'V' in box 12, that amount was deducted from the pilot's annual income. If no W2s were provided, but data provided by AMR indicated income for a year the pilot was on furlough for the entire year, the amount was assumed to be stocks and was deducted. This is only applied in the case of pilots not working for American Eagle in that year. If pilot was employed by American Eagle but no W2 was provided, (i.e., no code "V" to separate stocks from earned wages) then no deductions

² SQL: SELECT count(*),cvaluesrc FROM pq_datacheck where evalusrc is not null group by cvaluesrc

were applied. In the first year after furlough, income from AMR/Eagle was assumed to be wages, unless a W2 was provided that clearly indicated in Box 12 that some or all of income was actually code 'V', a stock option.

AL: APA payment: In 2006 the Allied Pilots' Association disbursed moneys from the settlement of a grievance. Where a W2 for this amount was provided, this amount was deducted. Where a pilot did not include a W2 for this amount, but where SSER and W2s were provided for all other source of income, the difference between SSER and the sum of W2s was assumed to be the APA payment. This assumed figure was deducted.

EI: Employment Insurance: Where documentation provided indicated that the pilot response included employment insurance payments, this amount was deducted from the pilot response.

F: Foreign Employment: If pilot claimed wages earned from foreign sources (Form 2555 or on pilot questionnaire) which were not included in SSER, foreign wages were added to SSER amount.

M: Medicare Corrections: Where the SSER is not available, and where W2s indicate that the Pilot Response used social security rather than medicare wage, the difference between social security and medicare wages was added to the pilot response.

MX: Medical Expenses: Only used when pilot had some proof of medical insurance expenditures. Where pilot provided estimates of medical insurance premiums and/or costs but incomplete supporting documentation, pilot's estimation was used. If pilot reported medical expenses on questionnaire but no documentation was provided, no deductions were applied from pilot's given estimates. If one lump figure for medical expenses was provided with some form of supporting documentation, figure was divided by number of years on furlough and a deduction was applied to each year. Where documents provided no dollar amounts (such as Enrollment Forms) and pilot did not provide estimated costs, no deductions were applied.

P: Pension, retirement, insurance contracts. Used when PR included an amount from pension, retirement, insurance income. This amount was always used as a deduction from pilot's response.

S: Secondary employment prior to furlough. For pilots who had secondary employment prior to furlough, the 3 year average was calculated. If 3 years of W2s, etc. were not available, then anywhere from 1 to 2 years were used. The average income from secondary employment was deducted for each year of furlough. If pilot retired or had a medical leave of absence, secondary employment was not deducted for that particular year or months. In event of missing W2s but where a pilot provided an estimate for secondary income, the pilot's answer was included in calculation. This approach was only used when the average pre-furlough secondary earnings would be lowered by pilot's response.

ZZ: Other. Most often used for 1099M (Miscellaneous Income) and other taxable income not documented anywhere else. This adjustment was used both to add set-off earnings and subtract non-set-off income from totals.

*Estimation of Set-Off of Furlough Damages
Attributable to Non-Responders / Pilots Providing
Insufficient Data*

As described above, there were a number of pilots from whom no or incomplete information was received. These damages are detailed as Category C in Figure 3, which summarizes the damages and interest under each of the scenarios that were presented in earlier reports. Without this information, set-off of furlough damages cannot be calculated for the Category C pilots. On average, 13% of the furlough damages under each model lacked sufficient documentation to establish the actual set-off of damages.

To estimate the damages attributable to Category C, for each model the lower of the Category A and Category B percentages of set-off to total damages was applied to the total Category C damages. For instance, under the SUPCC+200 (Marginal) model, the *set-off* damages (i.e. after set-off income has been applied to reduce damages) in Category A were 42% of the *unmitigated* damages, while those in Category B were 47% (i.e. pilots in Category B had less set-off income).

Given that one reason pilots may not have responded to the questionnaire is the possibility that the pilots believed their damages to have been set-off, it is reasonable to use a more conservative estimate of the damages attributable to that group. Therefore, to estimate the set-off of damages in Category C, the \$14.73M in unmitigated damages was multiplied by the lower of the two (42%) to obtain an estimate of damages of \$2.66M after applying set-off.

Figure 3**Unmitigated Damages Categorized by Response Quality (\$M)**

Model	Category A			Category B			Category C			Total
	Damages	Total	% of	Damages	% of Total	% of	Damages	Total	% of	
ARBMODEL	\$ 220.21	51%		\$ 155.39	36%		\$ 56.26	13%		\$ 432.37
DMODEL	\$ 180.83	51%		\$ 124.78	35%		\$ 46.67	13%		\$ 352.78
FARBER_1	\$ 237.15	50%		\$ 172.02	36%		\$ 63.14	13%		\$ 472.83
FARBER_2	\$ 278.64	48%		\$ 210.91	37%		\$ 83.77	15%		\$ 576.67
FARBER_3	\$ 181.09	51%		\$ 123.81	35%		\$ 46.43	13%		\$ 351.84
IOPTIMAL	\$ 249.23	50%		\$ 182.36	36%		\$ 69.56	14%		\$ 501.67
SUPCC+200	\$ 34.69	61%		\$ 16.17	28%		\$ 6.27	11%		\$ 57.20
TANNEN	\$ 317.47	48%		\$ 244.77	37%		\$ 98.51	15%		\$ 664.29

Set-Off Damages Categorized by Response Quality (\$M)

Model	Category A			Category B			Category C			Total
	Damages	Unmitig.	% of	Damages	Unmitig.	% of	Damages	A/B	Min of	
ARBMODEL	\$ 91.08	41%		\$ 65.51	42%		\$ 23.27	41%		\$ 179.85
DMODEL	\$ 74.29	41%		\$ 51.74	41%		\$ 19.17	41%		\$ 145.20
FARBER_1	\$ 99.97	42%		\$ 72.85	42%		\$ 26.62	42%		\$ 199.44
FARBER_2	\$ 117.59	42%		\$ 88.56	42%		\$ 35.18	42%		\$ 241.33
FARBER_3	\$ 77.79	43%		\$ 53.63	43%		\$ 19.94	43%		\$ 151.36
IOPTIMAL	\$ 102.64	41%		\$ 74.83	41%		\$ 28.54	41%		\$ 206.02
SUPCC+200	\$ 14.73	42%		\$ 7.66	47%		\$ 2.66	42%		\$ 25.06
TANNEN	\$ 137.16	43%		\$ 105.60	43%		\$ 42.50	43%		\$ 285.27

Interest on Set-Off Damages Categorized by Response Quality (\$M)

Model	Category A			Category B			Category C			Total
	Interest	Set-Off Dam.	% of	Interest	Set-Off Dam.	% of	Interest	A/B	Min of	
ARBMODEL	\$ 18.15	20%		\$ 12.64	19%		\$ 4.49	19%		\$ 35.28
DMODEL	\$ 14.96	20%		\$ 9.99	19%		\$ 3.70	19%		\$ 28.64
FARBER_1	\$ 19.89	20%		\$ 14.07	19%		\$ 5.14	19%		\$ 39.10
FARBER_2	\$ 23.36	20%		\$ 17.14	19%		\$ 6.81	19%		\$ 47.31
FARBER_3	\$ 15.71	20%		\$ 10.47	20%		\$ 3.89	20%		\$ 30.07
IOPTIMAL	\$ 20.15	20%		\$ 14.09	19%		\$ 5.37	19%		\$ 39.61
SUPCC+200	\$ 3.27	22%		\$ 1.71	22%		\$ 0.59	22%		\$ 5.57
TANNEN	\$ 27.24	20%		\$ 20.51	19%		\$ 8.25	19%		\$ 56.01

Interest

Interest on set-off damages was calculated using the US CPI rates used for earlier calculations. Interest on Category C damages was estimated by using the lower of the effective interest rates on Category A and B damages. For instance, under the DMODEL (Salamat) model, Category A interest is 20% of the set-off damages, while Category B interest is 19%. Using the approach as above, the lower rate of 19% yields an estimate of \$3.7M in interest on Category C damages.

Pension

Pension calculations for the American Airlines A and B plans were revised and recalculated using lower (or no) earnings under each of the models for pilots who a) would not have been on furlough in a particular year under the model and b) had set-off income in that year. Plan A pension impact was recalculated using a lower average final-five years of earnings (FF in the), adjusted to account for set-off income. Plan B damages similarly used a lower difference in income (DI) between Supplement CC and each of the models. Figure 4 outlines the revised pension damages under each model.

Figure 4

Model	Unmitigated			After Set-Off			Δ		
	Plan A	Plan B	Total	Plan A	Plan B	Total	Plan A	Plan B	Total
ARBMODEL	(92.8)	(189.3)	(282.1)	(92.2)	(117.8)	(210.0)	0.57	71.48	72.05
DMODEL	(72.8)	(143.4)	(216.3)	(72.8)	(87.7)	(160.6)	0.01	55.67	55.68
FARBER_1	(104.2)	(216.4)	(320.6)	(102.9)	(137.0)	(239.9)	1.28	79.45	80.73
FARBER_2	(121.3)	(261.0)	(382.3)	(119.5)	(160.6)	(280.0)	1.88	100.43	102.30
FARBER_3	(83.0)	(163.8)	(246.7)	(82.3)	(108.7)	(191.1)	0.63	55.04	55.67
IOPTIMAL	(114.0)	(234.6)	(348.6)	(111.5)	(149.7)	(261.2)	2.43	84.94	87.37
SUPCC+200	(13.0)	(24.1)	(37.1)	(13.0)	(17.2)	(30.2)	-	6.95	6.95
TANNEN	(130.9)	(293.5)	(424.4)	(128.5)	(173.9)	(302.4)	2.41	119.62	122.03

Technical Notes

Appendix 2 contains revised code used to calculate and generate reports and data.

Running the following command will recalculate set-off, export data files with summary results and populate data tables with the results:

```
MODEL.pl cmd mitig rpt_data SUPCC.ACT.F
```

Running the following command will recalculate pensions using set-off:

```
MODEL.pl pdiffm
```

Running the following command will export summary pension results:

```
MODEL.pl cmd mitig rpt_pdata
```

Appendix 3 contains several data tables. Below are notes relevant to each.

pq_datacheck : Data for each pilot who was furloughed at some point in time who provided a pilot response.

- cvalue: set-off income for year
- cvaluesrc: source of income
- adjustments: comma separated list of codes and values as discussed above
- notes: comments

pq_furhist: Furlough history, by year for each pilot.

- fstart: furlough start
- fend: furlough end
- need_*: indicates whether W2s, pilot questionnaire response, SSER or IRS 1040s were missing from pilot's response for year

pq_header: General information about pilots' responses

- contact_note_1: Message sent to pilot requesting additional information in addition to missing information indicated in need_* fields in pq_furhist
- datacheck: see discussion above
- datacheck_note: general comments about pilot's response

pq_mitigation: set-off and unmitigated damages for each year, for each model

pq_response: data from pilots' responses to questionnaire

- resptype: fbutr indicates pilot answered "furloughed but recalled" page, fnotr indicates pilot answered "furloughed not recalled" page.
- i2000-2012a/b/c: fields with values provided by pilot for income for each year
- q_notes: notes from pilot

pq_scanlog: Log of all scans.

pq_sser: Medicare earnings from pilots' social security earnings reports

amrs2data: Data provided by American Airlines

- source: "w2data" includes income from American Airlines employment, stock grant/option exercise and income from American Eagle. "w2data_noeagle" includes only employment income from American Airlines.

pension: results of pension calculations including set-off pension calculation

Summary

Figure 5 summarizes the damages from furlough³, broken down by category, in the years 2002 to 2011 under each of the models discussed in my earlier reports after set-off income has been applied.

Figure 5

Damages Due to Furlough After Application of Set-Off, 2002-2011

	Category A			Category B			Category C		
	Lost		Total	Lost		Total	Lost		Total
	Earnings	Pension		Earnings	Pension		Earnings	Pension	
ARBMODEL	\$ 109.22	\$ 82.44	\$ 191.66	\$ 78.15	\$ 57.10	\$ 135.25	\$ 27.76	\$ 70.51	\$ 98.27
DMODEL	\$ 89.24	\$ 66.57	\$ 155.81	\$ 61.72	\$ 45.26	\$ 106.98	\$ 22.87	\$ 48.75	\$ 71.63
FARBER_1	\$ 119.86	\$ 91.09	\$ 210.95	\$ 86.92	\$ 63.93	\$ 150.85	\$ 31.76	\$ 84.84	\$ 116.59
FARBER_2	\$ 140.96	\$ 107.81	\$ 248.77	\$ 105.70	\$ 78.55	\$ 184.26	\$ 41.98	\$ 93.68	\$ 135.66
FARBER_3	\$ 93.50	\$ 69.62	\$ 163.12	\$ 64.10	\$ 46.44	\$ 110.54	\$ 23.84	\$ 74.99	\$ 98.83
IOPTIMAL	\$ 122.79	\$ 96.93	\$ 219.72	\$ 88.92	\$ 67.37	\$ 156.29	\$ 33.92	\$ 96.95	\$ 130.87
SUPCC+200	\$ 18.00	\$ 12.85	\$ 30.85	\$ 9.38	\$ 6.29	\$ 15.66	\$ 3.25	\$ 11.04	\$ 14.30
TANNEN	\$ 164.40	\$ 122.62	\$ 287.03	\$ 126.11	\$ 90.83	\$ 216.95	\$ 50.76	\$ 88.95	\$ 139.71

Figures 6 to 8 are revised summaries of damages under all models discussed in earlier reports, amended with summary figures on set-off and its impact on:

1. Furlough damages
2. Interest on furlough damages
3. Plan A pension damages
4. Plan B pension damages

³ These are damages from lost earnings (lost salary plus interest) and the related pension impacts. They exclude damages from 2012 onwards and damages due to pilots holding lower paying positions, but who were not furloughed.

Figure 6

		Figures in \$M		
		Fairness Model	Arbitrated List	Salamat Damage Model
		Marginal (+200) Model		
April 2002 - June 2012				
Employment Damages	(243.7)	(168.1)	(109.8)	(25.4)
Interest	(41.6)	(28.2)	(17.8)	(3.9)
Subtotal	(285.4)	(196.3)	(127.6)	(29.3)
Furlough Damages	(501.7)	(432.4)	(352.8)	(57.2)
Interest	(80.8)	(72.8)	(59.7)	(11.9)
Subtotal	(582.5)	(505.2)	(412.5)	(69.1)
Subtotal	(867.9)	(701.5)	(540.1)	(98.4)
July 2012 - June 2026				
Employment Damages	(255.1)	(200.2)	(148.3)	(32.0)
PV Discount	29.4	23.4	17.3	3.4
Subtotal	(225.7)	(176.8)	(131.0)	(28.6)
Pension				
Plan A Damages	(114.0)	(92.8)	(72.8)	(13.0)
Plan B Damages	(234.6)	(189.3)	(143.4)	(24.1)
Total	(348.6)	(282.1)	(216.3)	(37.1)
Total Damages	(1,442.1)	(1,160.3)	(887.4)	(164.1)
Set-Off				
Furlough Damages	295.6	252.5	207.6	32.1
Interest	41.2	37.5	31.1	6.3
Plan A Damages	2.4	0.6	0.0	-
Plan B Damages	84.9	71.5	55.7	6.9
Total	424.2	362.1	294.3	45.4
Total Set-Off Damages	(1,017.9)	(798.3)	(593.1)	(118.7)

Figure 7

	Figures in \$M		
	Farber Seniority List #1	Farber Seniority List #2	Farber Seniority List #3
April 2002 - June 2012			
Employment Damages	(209.4)	(227.3)	(184.1)
Interest	(35.6)	(38.7)	(31.2)
Subtotal	(245.0)	(265.9)	(215.3)
Furlough Damages	(472.8)	(576.7)	(351.8)
Interest	(79.7)	(96.0)	(60.9)
Subtotal	(552.5)	(672.6)	(412.7)
Subtotal	(797.5)	(938.6)	(628.0)
July 2012 - June 2026			
Employment Damages	(235.5)	(276.3)	(186.4)
PV Discount	27.5	33.1	20.9
Subtotal	(208.0)	(243.2)	(165.5)
Pension			
Plan A Damages	(104.2)	(121.3)	(83.0)
Plan B Damages	(216.4)	(261.0)	(163.8)
Total	(320.6)	(382.3)	(246.7)
Total Damages	(1,326.2)	(1,564.1)	(1,040.2)
Set-Off			
Furlough Damages	273.4	335.3	200.5
Interest	40.6	48.6	30.8
Plan A Damages	1.3	1.9	0.6
Plan B Damages	79.5	100.4	55.0
Total	394.7	486.3	286.9
Total Set-Off Damages	(931.5)	(1,077.8)	(753.2)

Figure 8

Figures in \$M	Tannen Seniority List
April 2002 - June 2012	
Employment Damages	(213.4)
Interest	<u>(35.9)</u>
Subtotal	(249.3)
Furlough Damages	(664.3)
Interest	<u>(111.7)</u>
Subtotal	(776.0)
Subtotal	(1,025.3)
July 2012 - June 2026	
Employment Damages	(300.1)
PV Discount	<u>37.1</u>
Subtotal	(263.0)
Pension	
Plan A Damages	(130.9)
Plan B Damages	<u>(293.5)</u>
Total	(424.4)
Total Damages	(1,712.7)
Set-Off	
Furlough Damages	379.0
Interest	55.7
Plan A Damages	2.4
Plan B Damages	<u>119.6</u>
Total	556.8
Total Set-Off Damages	(1,155.9)

This report reflects my opinions to a reasonable degree of certainty within my area of expertise.



Rikk M.T. Salamat
Principal Consultant
Case Lab Inc.